

**UTILITY PATENT APPLICATION TRANSMITTAL  
(Large Entity)**

*(Only for new nonprovisional applications under 37 CFR 1.53(b))*

Docket No.

10000-1

Total Pages in this Submission

21

**TO THE ASSISTANT COMMISSIONER FOR PATENTS**

Box Patent Application

Washington, D.C. 20231

Transmitted herewith for filing under 35 U.S.C. 111(a) and 37 C.F.R. 1.53(b) is a new utility patent application for an invention entitled:

**VAPOR/LIQUID CONTACTING CYCLONE WITH SECONDARY VANES**

and invented by:

**John S. Buchanan; Berne K. Stober**

If a **CONTINUATION APPLICATION**, check appropriate box and supply the requisite information:

Continuation    Divisional    Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

Continuation    Divisional    Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Which is a:

Continuation    Divisional    Continuation-in-part (CIP) of prior application No.: \_\_\_\_\_

Enclosed are:

**Application Elements**

1.  Filing fee as calculated and transmitted as described below
  
2.  Specification having 13 pages and including the following:
  - a.  Descriptive Title of the Invention
  - b.  Cross References to Related Applications (*if applicable*)
  - c.  Statement Regarding Federally-sponsored Research/Development (*if applicable*)
  - d.  Reference to Microfiche Appendix (*if applicable*)
  - e.  Background of the Invention
  - f.  Brief Summary of the Invention
  - g.  Brief Description of the Drawings (*if drawings filed*)
  - h.  Detailed Description
  - i.  Claim(s) as Classified Below
  - j.  Abstract of the Disclosure

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## Application Elements (Continued)

3.  Drawing(s) (*when necessary as prescribed by 35 USC 113*)
  - a.  Formal Number of Sheets \_\_\_\_\_
  - b.  Informal Number of Sheets 5
4.  Oath or Declaration
  - a.  Newly executed (*original or copy*)  Unexecuted
  - b.  Copy from a prior application (37 CFR 1.63(d)) (*for continuation/divisional application only*)
  - c.  With Power of Attorney  Without Power of Attorney
  - d.  **DELETION OF INVENTOR(S)**  
Signed statement attached deleting inventor(s) named in the prior application,  
see 37 C.F.R. 1.63(d)(2) and 1.33(b).
5.  Incorporation By Reference (*usable if Box 4b is checked*)  
The entire disclosure of the prior application, from which a copy of the oath or declaration is supplied under Box 4b, is considered as being part of the disclosure of the accompanying application and is hereby incorporated by reference therein.
6.  Computer Program in Microfiche (*Appendix*)
7.  Nucleotide and/or Amino Acid Sequence Submission (*if applicable, all must be included*)
  - a.  Paper Copy
  - b.  Computer Readable Copy (*identical to computer copy*)
  - c.  Statement Verifying Identical Paper and Computer Readable Copy

## Accompanying Application Parts

8.  Assignment Papers (*cover sheet & document(s)*)
9.  37 CFR 3.73(B) Statement (*when there is an assignee*)
10.  English Translation Document (*if applicable*)
11.  Information Disclosure Statement/PTO-1449  Copies of IDS Citations
12.  Preliminary Amendment
13.  Acknowledgment postcard
14.  Certificate of Mailing

First Class  Express Mail (*Specify Label No.:* EI23853225US)

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**Accompanying Application Parts (Continued)**

15.  Certified Copy of Priority Document(s) *(if foreign priority is claimed)*

16.  Additional Enclosures *(please identify below):*

**Fee Calculation and Transmittal**

**CLAIMS AS FILED**

For	#Filed	#Allowed	#Extra	Rate	Fee
Total Claims	10	- 20 =	0	x \$22.00	\$0.00
Indep. Claims	4	- 3 =	1	x \$82.00	\$82.00
Multiple Dependent Claims (check if applicable)	<input type="checkbox"/>				\$0.00
				BASIC FEE	\$790.00
OTHER FEE (specify purpose)					\$0.00
				TOTAL FILING FEE	\$872.00

A check in the amount of \_\_\_\_\_ to cover the filing fee is enclosed.

The Commissioner is hereby authorized to charge and credit Deposit Account No. 19-3150 as described below. A duplicate copy of this sheet is enclosed.

- Charge the amount of \$872.00 as filing fee.
- Credit any overpayment.
- Charge any additional filing fees required under 37 C.F.R. 1.16 and 1.17.
- Charge the issue fee set in 37 C.F.R. 1.18 at the mailing of the Notice of Allowance, pursuant to 37 C.F.R. 1.311(b).

Penny L. Prater  
*Signature*

Dated: 6/30/98

Penny L. Prater  
 Attorney for the Applicant(s)  
 Registration Number 34,965  
 (703) 846-7746

cc:

**CERTIFICATE OF MAILING BY "EXPRESS MAIL" (37 CFR 1.10)**

Applicant(s): John S. Buchanan et al.

Docket No.

10000-1

Serial No.  
To Be AssignedFiling Date  
Concurrently HerewithExaminer  
To Be AssignedGroup Art Unit  
To Be Assigned

Invention: VAPOR/LIQUID CONTACTING CYCLONE WITH SECONDARY VANES

I hereby certify that this NEW APPLICATION*(Identify type of correspondence)*is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under  
37 CFR 1.10 in an envelope addressed to: The Assistant Commissioner for Patents, Washington, D.C. 20231on June 30, 1998  
*(Date)**(Typed or Printed Name of Person Mailing Correspondence)**(Signature of Person Mailing Correspondence)*E12385322225US*("Express Mail" Mailing Label Number)*

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